

REMARKS / ARGUMENTS

A. Summary of Amendments

The present application still contains 40 claims.

Claims 1-3, 13-15, 25, 27-29 and 40 have been amended to clarify the invention being claimed.

The Applicant respectfully submits that support for the amendments to the claims exists in the specification as originally filed, and that no new matter has been added to the application.

B. Rejection under 35 U.S.C. §102

The Examiner has rejected claims 1, 2, 4-14, 16-28, 30-38 and 40 under 35 U.S.C. §102(e) as being anticipated by United States Patent No. 6,466,548 (hereinafter referred to as Fitzgerald). The Applicant respectfully submits that claims 1, 2, 4-14, 16-28, 30-38 and 40, as amended, are neither anticipated nor rendered obvious by Fitzgerald.

Claim 1

The Examiner's attention is directed to the following limitations of amended claim 1 (emphasis added):

1. A method for controlling an operative setting of a communications link, the communications link being capable of acquiring a plurality of operative settings, said method comprising:
 - a) comparing audio quality in the communications link **under at least two operative settings**;
 - b) **selecting an operative setting from the at least two operative settings** at least in part on the basis of the comparing in a);

- c) sending a control signal to at least one component in the communications link to cause the communications link to attempt to acquire the selected setting.

The Applicant respectfully submits that the reference cited by the Examiner does not disclose, teach or suggest the subject matter of claim 1. Without limiting the generality of the foregoing, the Applicant respectfully submits that the reference cited by the Examiner does not disclose, teach or suggest the above-emphasized limitations of amended claim 1.

As the Examiner has noted in the Office Action, Fitzgerald provides a hop by hop loopback system that identifies and locates the causes of audio Quality of Service (QoS) problems by “analyzing different router delays” (p. 3) in a distributed packet switched network, and “once the location and source of the QoS problems is identified steps are taken to correct it such as setting priority bits in the audio packets” (p. 3).

Nowhere, however, in the analyzing of different router delays and setting of priority bits in audio packets, is there taught a comparison of (at least) two settings and the selection of one of those (at least) two settings. Put more specifically, there is nothing in Fitzgerald that teaches or suggests the steps of “comparing audio quality ... under at least two operative settings; [and] selecting an operative setting **from the at the least two operative settings**” (emphasis added) as required in amended claim 1. Rather, Fitzgerald only mentions analyzing a link under one condition, whatever condition it is, and identifying where delay or congestion occurs and describes ways this could be improved (e.g. such as setting priority bits in the audio packets). However, Fitzgerald does not compare the audio quality of the link under different operative settings.

In light of the foregoing, the Applicant respectfully submits that claim 1 is neither anticipated nor rendered obvious by Fitzgerald and as such, the Examiner is respectfully requested to withdraw the rejection of amended claim 1.

Claims 2, 4, and 5-12

Claims 2, 4, and 5-12 depend from claim 1 and therefore include by reference all the limitations of amended claim 1. As such, claims 2, 4, and 5-12 are also believed to be in allowable form and the Examiner is respectfully requested to withdraw the rejection of claims 2, 4, and 5-12.

Claim 13

The Examiner's attention is directed to the following limitations of amended claim 13 (emphasis added):

13. An apparatus for controlling an operative setting of a communications link, the communications link being capable of acquiring a plurality of operative settings, said apparatus comprising:
- a) an input for receiving data elements indicative of audio quality in the communications link under at least two operative settings;
 - b) a processing unit coupled to said input, said processing unit being operative for:
 - i) comparing the data elements received at the input **under the at least two operative settings**;
 - ii) **selecting an operative setting from the at least two operative settings** at least in part on the basis of the comparing in i);
 - iii) generating a control data element suitable for causing the communications link to attempt to acquire the selected setting;
 - c) an output for releasing a control signal indicative of the control data element to at least one component in the communications link for causing the communications link to attempt to acquire the selected setting.

The Applicant respectfully submits that the reference cited by the Examiner does not disclose, teach or suggest the subject matter of amended claim 13. Without limiting the generality of the foregoing, the Applicant respectfully submits that, for the same reasons as those set forth with respect to claim 1, Fitzgerald does not disclose, teach

or suggest the above-emphasized limitations of amended claim 13.

In light of the foregoing, the Applicant respectfully submits that amended claim 13 distinguishes over the cited art, and as such is believed to be in condition for allowance.

Claims 14 and 16-24

Claims 14 and 16-24 depend from claim 13 and therefore include all the limitations of amended claim 13. As such, claims 14 and 16-24 are also believed to be in allowable form and the Examiner is respectfully requested to withdraw the rejection of claims 14 and 16-24.

Claim 25

The Examiner's attention is directed to the following limitations of amended claim 25 (emphasis added):

25. An apparatus for controlling an operative setting of a communications link, the communications link being **capable of acquiring two operative settings namely a bypass setting and an active setting, when in the bypass setting the communications link transmitting an audio signal substantially unaltered, when in the active setting the communications link transmitting an audio signal subsequent to at least one processing operation on the audio signal**, said apparatus comprising:

- a) an input for receiving data elements indicative of an effectiveness of the at least one processing operation on the audio signal;
- b) a processing unit coupled to said input, said processing unit being operative for:
 - i) **selecting one of the bypass setting and the active setting** at least in part on the basis of the data elements received at the input;

- ii) generating a control data element suitable for causing the communications link to attempt to acquire the selected setting;
- c) an output for releasing a control signal indicative of the control data element to at least one component in the communications link for causing the communications link to attempt to acquire the selected setting.

The Applicant respectfully submits that the reference cited by the Examiner does not disclose, teach or suggest the subject matter of amended claim 25. Without limiting the generality of the foregoing, the Applicant respectfully submits that Fitzgerald does not disclose, teach or suggest the above-emphasized limitations of amended claim 25.

Fitzgerald is completely silent on the issue of tandem vocoding, and, more specifically, on an apparatus “capable of acquiring two operative settings namely a bypass setting and an active setting, when in the bypass setting the communications link transmitting an audio signal substantially unaltered, when in the active setting the communications link transmitting an audio signal subsequent to at least one processing operation on the audio signal ... comprising: ... **a processing unit operative for: selecting one of the bypass setting and the active setting**” (emphasis added) as required in amended claim 25.

In light of the foregoing, the Applicant respectfully submits that claim 25 is neither anticipated nor rendered obvious by Fitzgerald and as such, the Examiner is respectfully requested to withdraw the rejection of amended claim 25.

Claim 26

Claim 26 depends from claim 25 and therefore includes all the limitations of amended claim 25. As such, claim 26 is also believed to be in allowable form and the Examiner is respectfully requested to withdraw the rejection of claim 26.

Claim 27

The Examiner's attention is directed to the following limitations of amended claim 27 (emphasis added):

27. A computer readable medium comprising a program element suitable for execution by a computing apparatus for controlling an operative setting of a communications link, the communications link being capable of acquiring a plurality of operative settings, said computing apparatus comprising:

- a) a memory unit for storing the program element;
- b) a processor operatively coupled to said memory unit, said program element when executing on said processor being operative for implementing:
 - i) an input for receiving data elements indicative of audio quality in the communications link under at least two operative settings;
 - ii) a processing unit for:
 - (1) comparing the data elements received at the input **under the at least two operative settings**;
 - (2) **selecting an operative setting from the at least two operative settings** at least in part on the basis of the comparing in (1);
 - (3) generating a control data element suitable for causing the communications link to attempt to acquire the selected setting;
 - iii) an output for releasing a control signal indicative of the control data element to at least one component in the communications link for causing the communications link to attempt to acquire the selected setting.

The Applicant respectfully submit that the reference cited by the Examiner does not disclose, teach or suggest the subject matter of amended claim 27. Without limiting the generality of the foregoing, the Applicant respectfully submits that, for the same reasons as those set forth with respect to claim 1, Fitzgerald does not disclose, teach or suggest the above-emphasized limitations of amended claim 27.

In light of the foregoing, the Applicant respectfully submits that amended claim 27 distinguishes over the cited art, and as such is believed to be in condition for allowance.

Claims 28 and 30-38

Claims 28 and 30-38 depend from claim 27 and therefore include all the limitations of amended claim 27. As such, claims 28 and 30-38 are also believed to be in allowable form and the Examiner is respectfully requested to withdraw the rejection of claims 28 and 30-38.

Claim 40

The Examiner's attention is directed to the following limitations of amended claim 40 (emphasis added):

40. An apparatus for controlling an operative setting of a communications link, the communications link being capable of acquiring a plurality of operative settings, said apparatus comprising:
- a) means for receiving data elements indicative of audio quality in the communications link **under at least two operative settings**;
 - b) processing means operative for:
 - i) comparing the data elements received;
 - ii) **selecting an operative setting from the at least two operative settings** at least in part on the basis of the comparing in i);
 - iii) generating a control data element suitable for causing the communications link to attempt to acquire the selected setting;
 - c) means for releasing a control signal indicative of the control data element to at least one component in the communications link for causing the communications link to attempt to acquire the selected setting.

The Applicant respectfully submits that the reference cited by the Examiner does not

disclose, teach or suggest the subject matter of amended claim 40. Without limiting the generality of the foregoing, the Applicant respectfully submits that, for the same reasons as those set forth with respect to claim 1, Fitzgerald do not disclose, teach or suggest the above-emphasized limitations of amended claim 40.

In light of the foregoing, the Applicant respectfully submits that amended claim 40 distinguishes over the cited art, and as such is believed to be in condition for allowance.

C. Rejection under 35 U.S.C. §103

The Examiner has rejected claims 3, 15 and 29 under 35 U.S.C. §103(a) as being unpatentable over Fitzgerald. The Examiner has further rejected claim 39 under 35 U.S.C. §103(a) as being obvious over Fitzgerald in view of United States Patent No. 6,574,469 (hereinafter referred to as Xiang *et al.*). The Applicant respectfully submits that claims 3, 15, 29 and 39 are not rendered obvious by the cited documents and are in allowable form.

Claims 3, 15, and 29

Claims 3, 15 and 29 depend from claims 1, 13, and 27, respectively, and therefore include all the features of one of those independent claims, including those features neither taught nor suggested by Fitzgerald.

According to MPEP 706.02(j), in order to establish a *prima facie* case of obviousness, “the prior art reference (or references when combined) must teach or suggest all the claim limitations”. As such, it is respectfully submitted that the Examiner has not presented a *prima facie* case of obviousness in accordance with MPEP 706.02(j) since Fitzgerald does not teach or suggest all of the limitations of the above-identified claims. Thus, it is respectfully requested that Examiner withdraw the rejection of claims 3, 15 and 29.

Claim 39

With regard to the Examiner's rejection of claim 39 as being unpatentable over Fitzgerald in view of Xiang *et al.*, the Applicant respectfully disagrees with the Examiner's rejection on the basis that the Examiner has failed to establish a *prima facie* case of obviousness.

In order to establish a *prima facie* case of obviousness, three criteria must be considered: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings, (2) there must be a reasonable expectation of success, and (3) the prior art references must teach or suggest all of the claim limitations (MPEP §§ 706.02(j), 2142 (8th ed.)).

Regarding the first criteria listed above, the applicant submits that Fitzgerald and Xiang *et al.* relate to non-analogous art. More specifically, Fitzgerald provides a hop by hop loopback system that identifies and locates the causes of audio QoS problems in a distributed packet switched network by analyzing different router delays in the network. Once the location and source of the QoS problem are identified, "priority bits in the audio packets to increase priority" (col. 5, lines 25-26).

In contrast, Xiang *et al.* provides a "method of minimizing the number of transcodings of a speech signal during a conference call ... when the call is transported over a packet-switched network... in which Tandem Free Operation (TFO) is utilized to control transcoding of the speech signal" (col. 2, lines 20-27).

In the Office action, the Examiner has stated that "one would be motivated to [combine Fitzgerald and Xiang *et al.*] to reduce the costs and improve speech quality in a VOIP environment such as the one disclosed by Fitzgerald". However, as stated in the case of *In re Oetiker* 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed Cir. 1992), "there must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of that invention would make the combination. That knowledge can not come from the Applicant's invention itself".

The subject matter of Fitzgerald is completely unrelated to the concept of Tandem Free Operation and therefore would derive no benefit from "minimizing the number

of transcodings of a speech signal during a conference call". Similarly, the Applicant respectfully submits that the subject matter of Xiang *et al.* is completely unrelated to, and would therefore derive no benefit from, a hop by hop loopback system for determining the location and causes of audio QoS. As such, the Applicant respectfully submits there is no reason, suggestion or motivation found in the prior art to combine these references.

Regarding the third criteria listed in MPEP §§ 706.02(j), namely that the prior art references must teach or suggest all of the claim limitations, the Examiner's attention is directed to the following limitations of amended claim 39 (emphasis added):

39. An apparatus for selectively enabling tandem-free operation of a communications link, the communications link comprising at least one functional stage operative to implement at least one processing operation on an audio signal, during tandem-free operation said at least one functional stage being disabled, said apparatus comprising:
- a) **an input for receiving data elements indicative of an effectiveness of the at least one processing operation on the audio signal;**
 - b) **a processing unit coupled to said input, said processing unit being operative for processing the data element to generate a control data element suitable for causing the communications link to selectively enable tandem-free operation of the communications link;**
 - c) **an output for releasing a control signal indicative of the control data element to the at least one functional stage in the communications link for selectively enabling tandem-free operation.**

The Applicant respectfully submits that the neither of the references cited by the Examiner disclose, teach or suggest the subject matter of claim 39. Without limiting the generality of the foregoing, the Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the above-emphasized limitations of amended claim 39.

Fitzgerald, as discussed above, is completely silent on the issue of tandem vocoding. In addition, Fitzgerald fails to teach or suggest:

“an input for receiving data elements indicative of an effectiveness of the at least one processing operation on the audio signal;” and

“ a processing unit ... operative for processing the data element to generate a control data element suitable for causing the communications link to selectively enable tandem-free operation of the communications link”

as required by claim 39.

Xiang *et al.*, for its part, describes a series of handshaking operations required to minimize the number of transcodings in a three-way conference call. There is nothing in Xiang *et al.* that teaches or suggests:

“an apparatus ... comprising: an input for receiving data elements indicative of an effectiveness of the at least one processing operation on the audio signal” and

“operative for processing the data element to generate a control data element suitable for causing the communications link to selectively enable tandem-free operation of the communications link”

(emphasis added), as required by claim 39.

Since no motivation to combine Fitzgerald and Xiang *et al.* is found in either of these references, and because the prior art references, alone or in combination, do not teach or suggest all of the claim limitations, the Applicant respectfully submits that the Examiner has failed to meet the criteria for establishing a *prima facie* case of obviousness as required by MPEP 706.02(j). Thus, it is respectfully requested that Examiner withdraw the rejection of claim 39.

CONCLUSION

In view of the above, it is submitted that claims 1-40 are in condition for allowance. Reconsideration of the rejections is requested. Allowance of claims 1-40 at an early date is earnestly solicited.

If the application is not considered to be in full condition for allowance, for any reason, the Applicant respectfully requests the constructive assistance and suggestions of the Examiner in drafting one or more acceptable claims pursuant to MPEP 707.07(j) or in making constructive suggestions pursuant to MPEP 706.03 so that the application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Respectfully submitted,



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